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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,923	02/25/2004	Kang Soo Seo	1740-000086/US	4876
30593 7590 11/20/2009 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195				
EXAMINER ADEGEYE, OLUWASEUN				
ART UNIT 2621		PAPER NUMBER		
MAIL DATE 11/20/2009		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/786,923

Applicant(s)

SEO ET AL.

Examiner

OLUWASEUN A. ADEGEYE

Art Unit

2621

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/25/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 25 is/are pending in the application.
- 4a) Of the above claim(s) 11 - 12, 15 - 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 10, 13 - 14 and 18 - 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02/25/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 10, 13 – 14 and 18 - 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori et al (US 2002/0095531 A1) in view of Konuma (US 2002/0085122 A1)

As to **claim 1**, Mori in view of discloses a method for recording graphic/subtitle data on a recording medium, comprising the steps of:

receiving video data (video signal) and additional data including graphic data and/or subtitle data (graphic signal) (see [79]); and

recording the additional data on the recording medium (DVD) by dividing and organizing the additional data in such a way that the additional data is included in a plurality of regions that will be overlaid on a video image constructed from the video data (see [79] and [80]).

wherein the additional data is included in a plurality of sub-planes based on a type of the additional data, each of the sub-planes including at least one of the distinct regions (see [079] and [080] paragraph discloses outputting a video signal and then overlaying a graphic signal on the video signal).

wherein each of the distinct regions of each of the sub-planes includes an object so that the additional data of each of the regions of each of the sub-planes are configured to be overlaid in the video image (see [079] and [080]e paragraph discloses outputting a video signal and then overlaying a graphic signal on the video signal).

Mori does not disclose that the additional data including graphic data and subtitle data.

Mori also does not disclose wherein the video data is presented on a main plane, and the additional data is configured to be presented on a plurality of sub-planes based on a type of the additional data, so that at least one of the plurality of distinct regions is configured to be presented on each of the sub-planes.

Mori also does not disclose wherein each of the distinct regions of each of the sub-planes includes an object so that the additional data of each of the distinct regions of each of the sub-planes are configured to be overlaid on the video data of the main plane.

However Konuma discloses that the additional data including graphic data and subtitle data (see [093]).

Konuma discloses wherein the video data is presented on a main plane, and the additional data is configured to be presented on a plurality of sub-planes based on a

type of the additional data, so that at least one of the plurality of distinct regions is configured to be presented on each of the sub-planes (see fig. 2, fig. 3 and [007]).

Konuma discloses wherein each of the distinct regions of each of the sub-planes includes an object (text) so that the additional data of each of the distinct regions of each of the sub-planes are configured to be overlaid on the video data of the main plane (see fig. 2, fig. 3, [078] and [093]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the additional data and the video data of Konuma to the apparatus of Mori to provide a method for simultaneously displaying plural images having different formats such as moving pictures, still pictures, and graphics on a display (see [002]).

As to **claim 6**, grounds for rejecting claim 1 apply to claim 6 in its entirety.

As to **claim 9**, this is a computer readable claim corresponding to the method claim 1, As to claim 9, grounds for rejecting claim 1 apply to claim 9 in its entirety. Mori discloses a DVD (see [78]). Therefore, claim 9 is analyzed and rejected as previously discussed with respect to claim 1.

As to **claim 13**, grounds for rejecting claim 1 apply to claim 13 in its entirety.

As to **claim 18**, grounds for rejecting claim 1 apply to claim 18 in its entirety.

As to **claim 21**, grounds for rejecting claim 18 apply to claim 21 in its entirety.

As to **claim 2**, Konuma discloses wherein the graphic data and subtitle data are organized into distinct sub-planes (see fig 2, fig 3 and [093]).

As to **claim 3**, Mori in view of Konuma discloses the method set forth in claim 1. Konuma discloses wherein the plurality of sub-planes include a graphic sub-plane and a subtitle sub-plane (see fig 2, fig 3 and [093]).

As to **claim 4**, Mori in view of Konuma discloses the method set forth in claim 1. Konuma discloses wherein each of the plurality of sub-planes includes at most two of the distinct regions (see fig. 2 and fig. 3)

As to **claim 5**, Mori in view of Konuma discloses the method set forth in claim 4. Konuma discloses wherein the object is text, an icon, an image, or a background box (see [093]).

As to **claim 7**, Mori in view of Konuma discloses the method set forth in claim 6. Mori discloses wherein the number of the plurality of streams is the same as the number of graphic decoders contained in a reproducing apparatus (see [79] – [80] and fig. 9).

As to **claim 8**, Mori in view of Konuma discloses the method set forth in claim 6. Mori discloses wherein parts of the additional data that should be simultaneously decoded are placed in distinct additional streams (see [79] – [80] and fig. 9).

As to **claim 10**, Mori in view of Konuma discloses the high-density recording medium set forth in claim 9. Mori discloses wherein the graphic data and subtitle data are organized into distinct regions (see [79] – [80] and fig. 9).

As to **claim 12**, grounds for rejecting claim 8 apply to claim 12 in its entirety.

As to **claim 14**, grounds for rejecting claim 8 apply to claim 14 in its entirety.

As to **claim 16**, grounds for rejecting claim 7 apply to claim 16 in its entirety.

As to **claim 17**, grounds for rejecting claim 8 apply to claim 17 in its entirety.

As to **claim 19**, Mori in view of Konuma discloses the method set forth in claim 18. Konuma discloses wherein the plurality of planes include a subtitle plane and a graphic plane (see fig 2, fig 3 and [093]).

As to **claim 20**, Mori in view of Konuma discloses the method set forth in claim 19. Konuma discloses wherein the subtitle plane includes decoded graphic data as well as decoded subtitle data (see fig 2, fig 3 and [093]).

As to **claim 22**, Mori in view of Konuma discloses the apparatus set forth in claim 21. Konuma discloses wherein the second means organizes the additional data into a subtitle plane and a graphic plane (see fig 2, fig 3 and [093]).

As to **claim 23**, Mori in view of Konuma discloses the apparatus set forth in claim 22. Konuma discloses wherein the second means organizes the subtitle plane such that the subtitle plane includes decoded graphic data as well as decoded subtitle data (see fig 2, fig 3 and [093]).

As to **claim 24**, Mori in view of Konuma discloses the method set forth in claim 1. Mori discloses wherein the graphic data and the subtitle data are decoded by different decoders (see [79] – 80] and fig. 9).

As to **claim 25**, grounds for rejecting claim 24 apply to claim 25 in its entirety.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUWASEUN A. ADEGEYE whose telephone number is (571)270-1711. The examiner can normally be reached on Monday - Friday 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on 571-272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marsha D. Banks-Harold/
Supervisory Patent Examiner, Art Unit 2621

11/18/2009

/O.A/